

Balloon Rocket Lab
AP Physics

19 Points Total

Instructions:

1. Attach the balloon to the straw, and place the fishing line through the straw.
2. Pull the string tight, blow up the balloon, and release balloon.
3. Measure the x-displacement and time of the balloon.
4. Repeat for seven trials.
5. Calculate acceleration and force.

Rubric:

1. Procedure (3).
2. Data table (3).
3. Calculations for acceleration and force (3). Show one full calculation for each of acceleration and force, and use the equations to complete the data.
4. Draw and fully label a free-body diagram of the balloon releasing air. (3).
5. Sources of error and ways to minimize (4; 2 each).
6. Conclusions (3).